

# Trendlines

September/October 2006

*Perspectives On Utah's Economy*

## ***What's in Your Future?*** ***Occupational Outlook & Education Issue***

*Education Pays*

*Job Growth in Utah Thriving*

*Trip of a Lifetime: Get  
Directions!*

*U.S. Occupational Outlook  
to 2014*

*Utah Job Trends*



## Trendlines

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# Trendlines

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# Occupational Outlook and Education Issue

September/October 2006

# Contents

4	Sharing the Good Times Wasatch Front and Statewide Highlights
6	Education Pays Economic Insight
8	Job Growth in Utah Thriving The Outskirts
10	Inflation Fears Becoming an Economic Hurdle National News
12	Career Spotlight Occupations
13	Any Way You Slice It What's Happening
16	Trip of a Lifetime: Get Directions! Our Guest
18	U.S. Occupational Outlook to 2014 Insider News
20	Utah Job Trends The Outlook
23	MotorFest: A Great Opportunity for Utah Youth DWS News
24	From Sports to Space Composites
26	Weber County County Highlight
27	The Facts Are... Rate Update

# Sharing the Good Times



Utah's economy continues growing at a strong pace. Employment growth of 4.8 percent for June keeps Utah's economy among one of the country's best. Not only are all industry sectors growing, but all of the state's geographic regions are also sharing in the good times.

Arguably the most robust region in the state right now is the Uintah Basin, growing by 14 percent and energized by its oil and gas industry. Both Uintah and Duchesne counties are seeing a boom that rivals the rapid employment growth that went along with their last energy boom in the 1970s. The employment gains are trickling down into other industries as well. Construction jobs are on the rise. The need to move more goods and raw materials has produced an increase in trucking jobs. Increasing population in the area is pushing up retail jobs and generating more employment in the financial sector due to increased transactions.

Then there is Washington County and the southwest corner of the state. Recently, the St. George area was measured as the country's fastest-growing metropolitan economy, based upon employment growth. A June growth rate of 8.5 percent probably does nothing to drop St. George from that position. Prosperity is not just limited to Washington County. Iron County to the north, centered around Cedar City, added 7.9 percent more jobs over the past year. And Kane County bested that with a 12 percent year-over employment growth rate.

The mountainous counties of Summit and Wasatch, east of Salt Lake City and Provo, are experiencing high employment growth percentages—measuring 12.2 and 13.0 percent respectively. Population growth is spurring construction growth in both counties. More people are also supporting more retail trade outlets. In Summit County the leisure and hospitality industry is also doing well, with employment gains in both lodging establishments and restaurants.

Even normally tranquil southeastern Utah is springing to life. Both Emery and San Juan counties have a long history of being less-than-stellar economies.

But currently, employment is growing at 9.3 and 3.6 percent respectively. In Emery, new mining, construction, utility, and trucking jobs are fueling the economy. Carbon County, which can also have long periods of economic stagnation, is thriving, growing by 8.6 percent. Here it's mining,

construction, trucking, and retail trade that are adding new jobs.

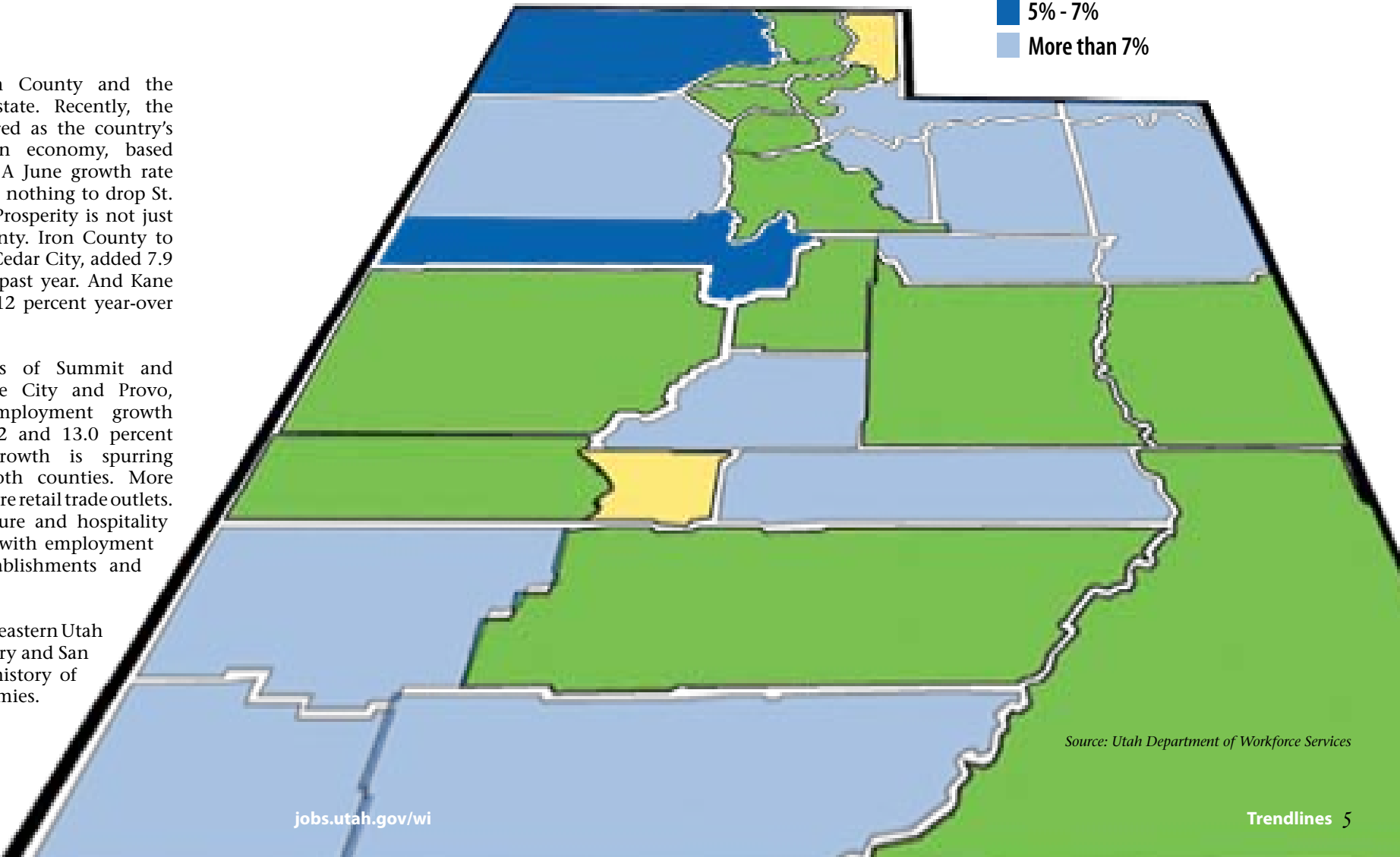
To follow the latest economic events: <http://jobs.utah.gov/wi/press/tlextra/tlextracurrent.asp>

- People moving from California, many of them Hispanic, are fueling Utah's population growth. <http://deseretnews.com/dn/view/0,1249,640197735,00.html>
- Utah saw a lot more "action!" from its film industry during the most recent fiscal year. <http://deseretnews.com/dn/view/0,1249,640194879,00.html>
- A suburban housing boom likely is fueling construction and new projects in Salt Lake City. <http://deseretnews.com/dn/view/0,1249,640197741,00.html>
- Wasatch Front home prices continued to soar in this year's second quarter. <http://deseretnews.com/dn/view/0,1249,640196432,00.html>

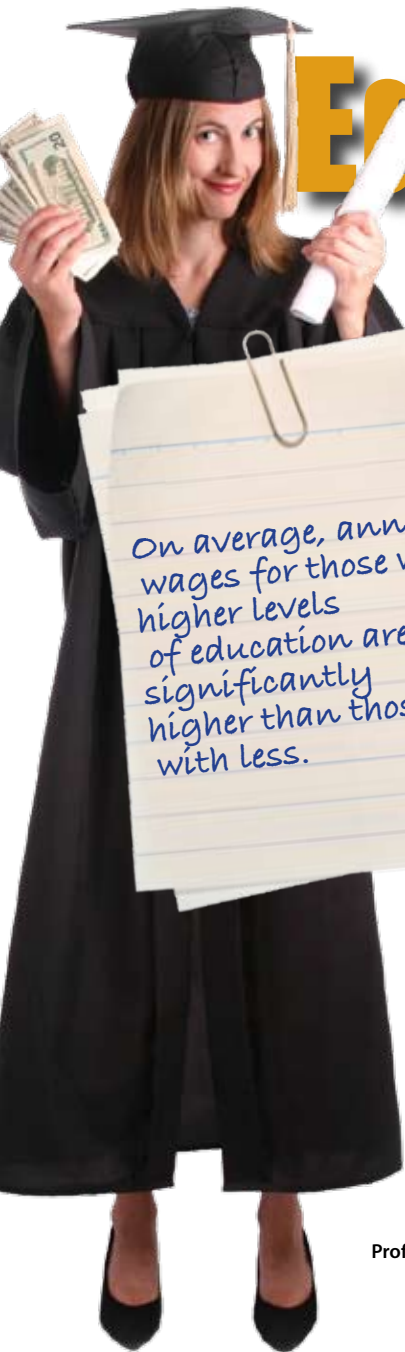
## Employment Growth

by County • June 2006

- Less than 2%
- 2% - 5%
- 5% - 7%
- More than 7%



Source: Utah Department of Workforce Services



# Education Pay\$

On average, annual wages for those with higher levels of education are significantly higher than those with less.

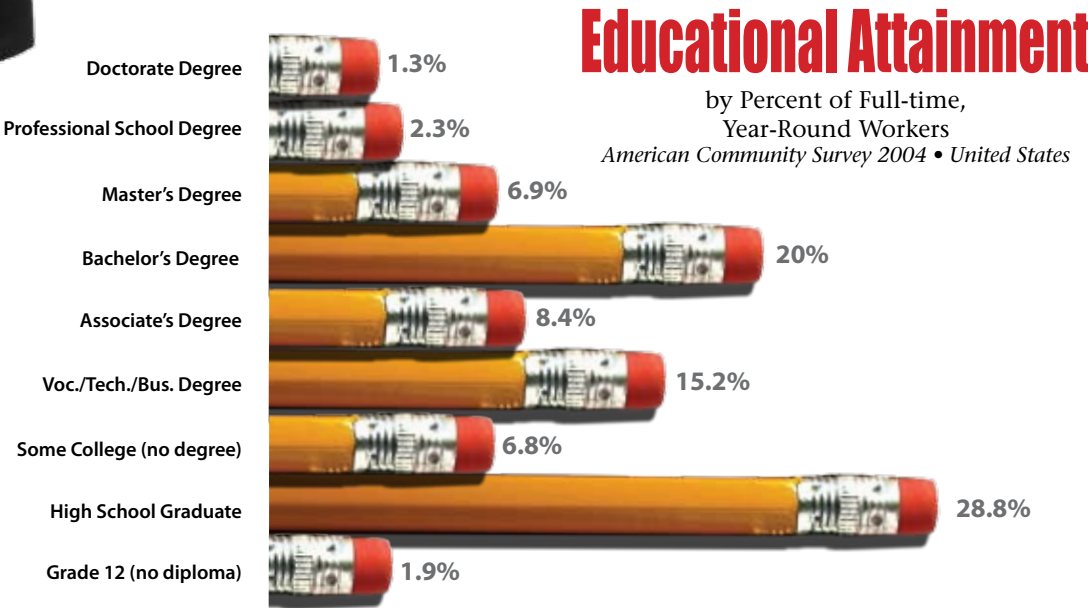
The idea that education pays, and that more education pays even more, is a frequent topic on these pages. Basic economic theory argues that as individuals increase their human capital—their stock of knowledge and skills—their productivity and, therefore, the level of wages they can command, also rises.

Of course, there are all kinds of difficulties when trying to apply abstract, yet elegant, theories to reality. Yes, there are some high school dropouts who make a very comfortable living. However, for the vast majority of people who drop out, their potential average annual wages are

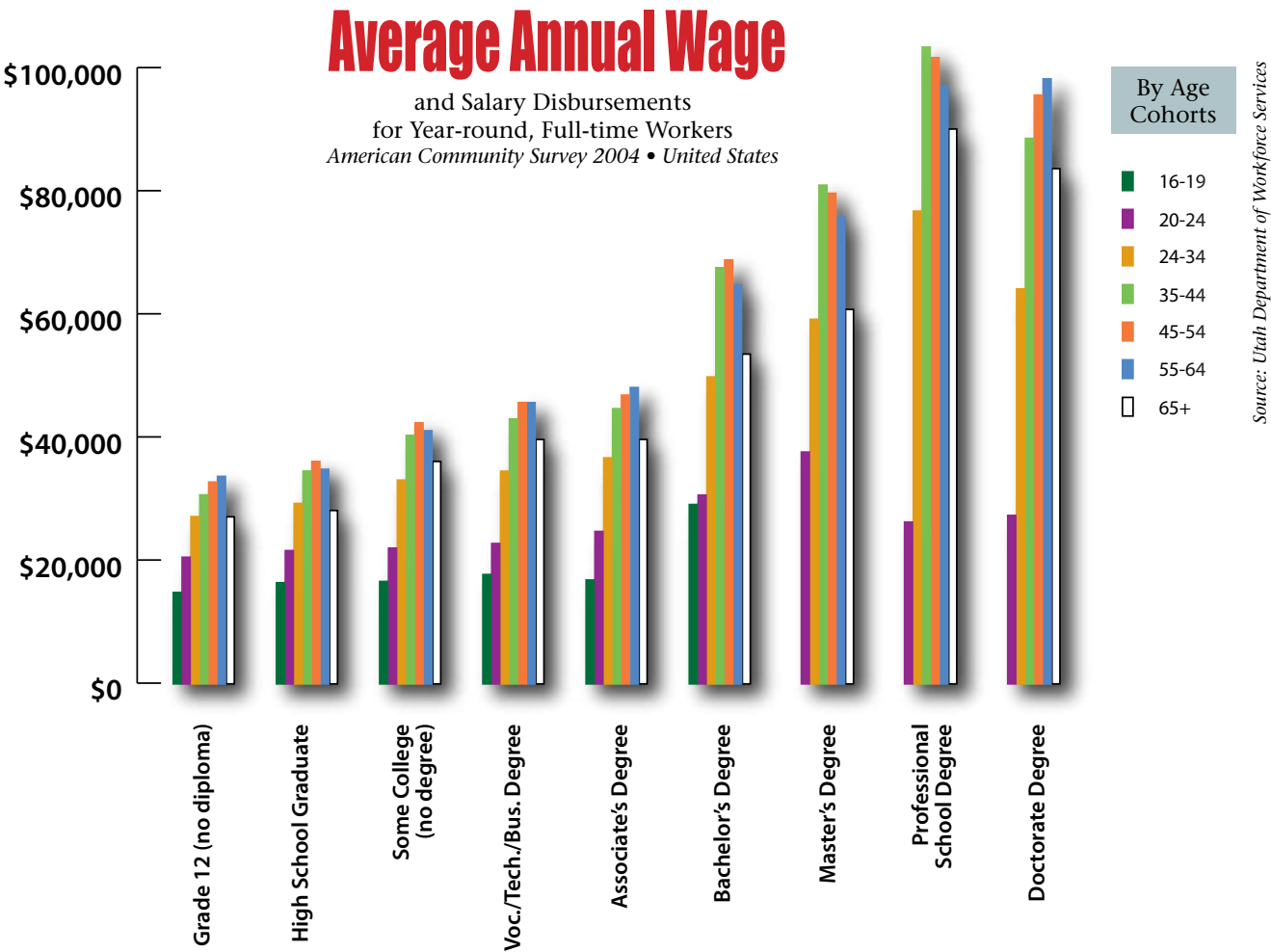
significantly lower for the rest of their lives than those lucky exceptions.

This last point becomes crystal clear with even a quick glance at the relevant statistics. Using data from the American Community Survey (ACS) it is possible to take a snapshot of the American economy and see average annual wages for year-round, full-time workers—people who worked 50-52 weeks for 35 or more hours per week—by educational attainment level for 2004.

Looking at the results of this tabulation, it is obvious that, on average, annual wages for those with higher levels of education are significantly higher than those with less. Moreover, there is an orderly progression of increasing wages right up the education scale, with average annual wages reaching its maximum with those who have a professional school degree, such as a law degree.



Source: Utah Department of Workforce Services



Source: Utah Department of Workforce Services

However, there is a more interesting way to look at this data. We can take the same educational attainment levels, but look at average annual wages by age cohort. This allows us, for example, to compare what a 16-year-old with a high school degree is making compared with a 45-year-old with the same level of education. This approach also provides some interesting insights into the impact of education on long-term earnings potential. For example, among high school dropouts, by the time they are 25 years old their lifetime annual wages potential is basically maxed out. That is to say, those at the same level of education who are 45, or even 55, don't make much more per year than the 25-year-old.

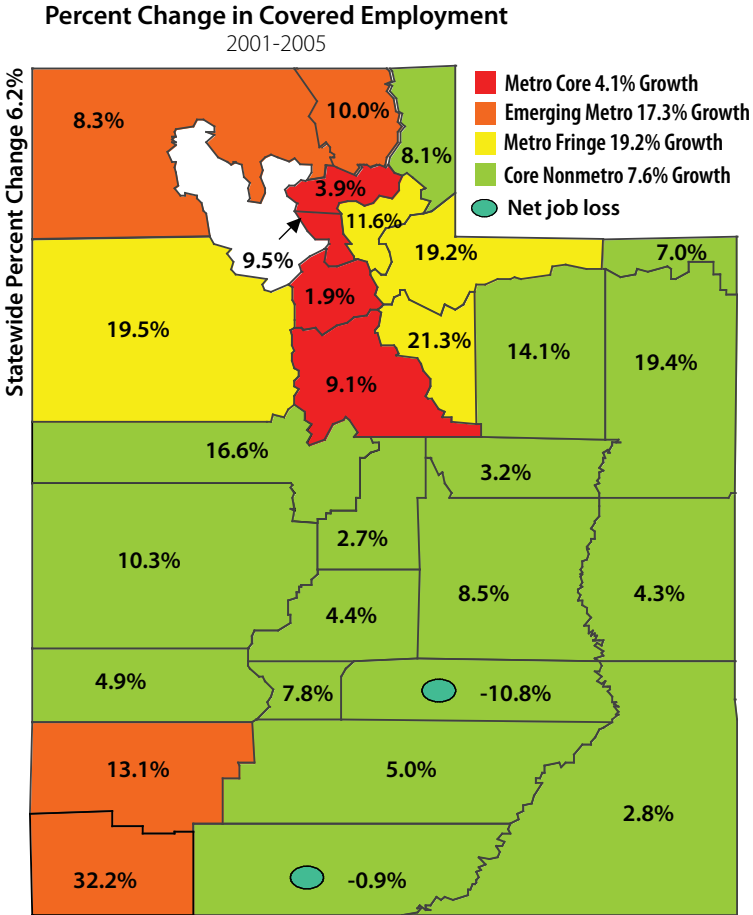
On the other hand, those people with a master's degree can look forward to significant increases in their annual wages over time. A 24-year-old may net an average annual wage of just below \$40,000 a year to begin with, only to see it rise to

nearly \$80,000 by his late thirties. The situation is similar for other graduate degrees. This appears to suggest that workers with graduate degrees see gains not only from their education but also from their work experience in a way that those with lower levels of education don't.

A final point to remember: human capital development—just a fancy way of saying increasing your level of knowledge and skills—is just as important to you as it is to the state and the nation. Improving your skills and education is crucial in creating the economic foundation from which the state and the nation can grow and prosper, not to mention, you might enjoy the higher wages you can command.

# Job Growth In Utah

# Thriving



Source: Utah Department of Workforce Services.

We have all heard that Utah's economy is surging. That is good news for workers and businesses. One of the notable aspects of Utah's growth is that a significant portion of it has occurred outside of metropolitan Utah. The 2002-2003 recession impacted the metro area more than it did non-metro Utah. Since the recession's impact was fairly mild in non-metro areas, as the state's economy recovered, this area was well poised to benefit.

### Jobs, Jobs, and More Jobs

From 2001 to 2005, the state's economy added nearly 67,000 new jobs. Non-metro Utah accounted for 46 percent of the total. During that time, Utah employment expanded by 6.2 percent, with the metro area growing 4.1 percent and the non-metro expanding by 14.6 percent. The metro fringe grew 19.2 percent followed by the emerging metro counties, which rose 17.3 percent. The core non-metro area experienced employment growth of 7.6 percent as well (see map).

### And the Winners Are...

The top five industries statewide for job growth in the 2001 to 2005 period were: healthcare and social services (17,000), construction (10,000), education (8,000), public administration (6,300) and administrative support and waste management (6,200) jobs. In the non-metro area construction was the main supplier of job growth adding nearly 5,500 jobs. Employment also grew in healthcare and social services (5,100), transportation and warehousing (2,400), retail trade (2,400), and accommodations and food services (2,200). Statewide, manufacturing lost the most jobs, declining by 4,900 jobs. In the non-metro area, management of companies reported job losses, losing nearly 900 jobs.

### Times, They Are A-Changing

Utah's non-metro counties can be grouped together by similar economic characteristics. The emerging metro counties dominate the non-metro data. These counties accounted for 63 percent of the job growth. Construction and healthcare were the main growth industries. In the metro fringe counties, growth was driven by transportation and warehousing followed by accommodations and food services. For the remaining core non-metro counties, mining accounted for most of

the jobs, as the increased demand for energy has revitalized the mining industry in oil, natural gas, coal, and uranium. Healthcare and social services also added positions.

### Help Wanted ... Now!

The economic outlook remains healthy for non-metro Utah. Strong population growth in the emerging and fringe counties will sustain demand for construction, healthcare, and retail. The strength of the core non-metro counties will depend on what happens in energy-related industries. The implications for job seekers in non-metro Utah is to look at businesses in these growing industries; they will be the ones looking to hire workers to meet market demands.

For more information visit these links:

- <http://jobs.utah.gov/jsp/wi/utalmis/gotoCounties.do>
- <http://jobs.utah.gov/firmfind/pgMain.asp?thesessionID=1042323928>
- <http://jobs.utah.gov/opencms/wi/employer/>

- Beaver County and Milford City officials broke ground on a \$5.5-million overpass project at a railroad crossing. The two-lane overpass will be completed next summer. <http://www.thespectrum.com/apps/pbcs.dll/article?AID=/20060616/NEWS01/606160307/1002>
- The Kane County Water Conservancy District received a loan of \$2.6 million and a grant of \$2.2 million from the U.S. Dept. of Agriculture Rural Development Office to develop a new well, a concrete storage tank, a booster station and chlorination system. <http://www.thespectrum.com/apps/pbcs.dll/article?AID=/20060531/NEWS01/605310319/1002/NEWS01>
- A ground breaking ceremony was held for the new Salina Intermountain Clinic. The new clinic is slated to have six examination rooms and a pharmacy. It will also have an X-ray facility — saving people trips to Richfield and Gunnison. <http://www.richfieldreaper.com/articles/2006/06/21/news/01.txt>

Area	Gainers	Number Gained	Losers	Number Lost
Emerging Metro Counties (Box Elder, Cache, Iron and Washington)	Construction	4,300	Management of Company	-500
	Healthcare	3,711		
	Retail Trade	1,700		
	Manufacturing	1,300		
	Professional and Business Services	1,200		
Metro Fringe Counties (Morgan, Summit, Tooele and Wasatch)	Transportation/Warehousing	930	Management of Company	-70
	Accommodation/Food Services	920	Covered Agriculture	-60
	Administrative Support/Waste Services	610	Mining	-10
	Construction	580		
	Retail Trade	570		
Core Nonmetro Counties (Beaver, Carbon, Daggett, Duchesne, Emery, Garfield, Grand, Juab, Kane, Millard, Piute, Rich, San Juan, Sanpete, Sevier, Uintah and Wayne)	Mining	1,240		
	Healthcare	960	Manufacturing	-290
	Transportation/Warehousing	730	Management of Company	-280
	Construction	560	Education	-110
	Public Administration*	370	Arts, Entertainment, Recreation	-60

\*Note: Public administration excludes public education. Education is both public and private services.

Source: Utah Department of Workforce Services



# Inflation Fears

Becoming

# an Economic Hurdle

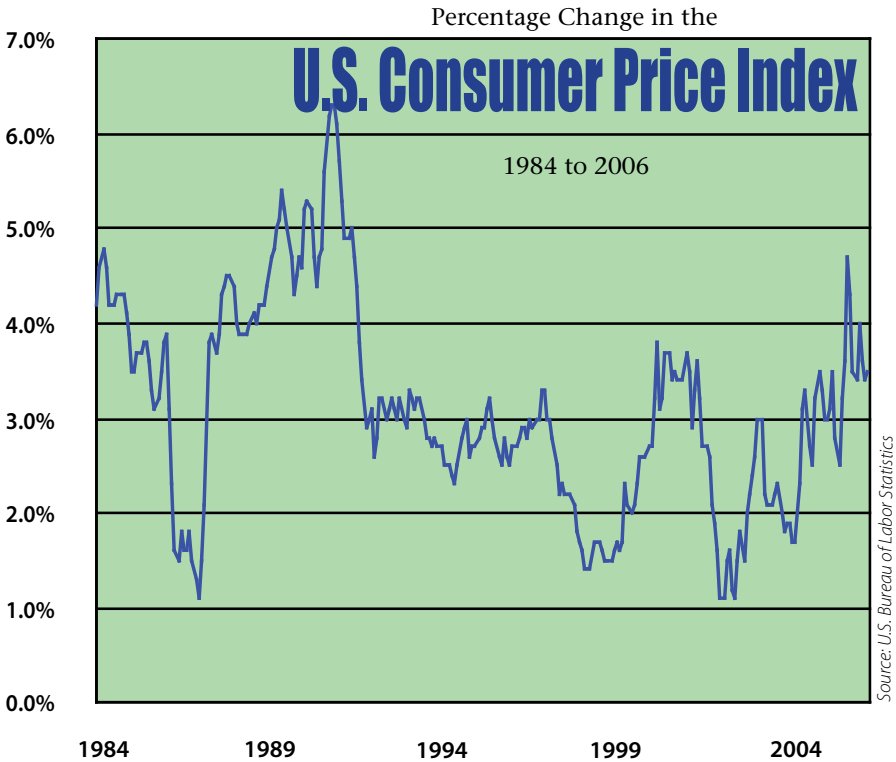
The U.S. economy performed well in the first quarter of 2006. Gross Domestic Product (GDP) growth was a resounding 5.6 percent; the unemployment rate has dipped below 5 percent; and the economy has added close to two million new jobs over the past year. While acknowledging the current prosperity, many economists anticipate that GDP will slow as 2006 plays out.

Consumers are the biggest spenders in the economy. In the past several years, consumers used the housing market as their major spending catalyst—taking advantage of rising equity and low interest rates. But with the housing market cooling and interest rates rising, consumers will likely begin to exhibit more caution in their spending.

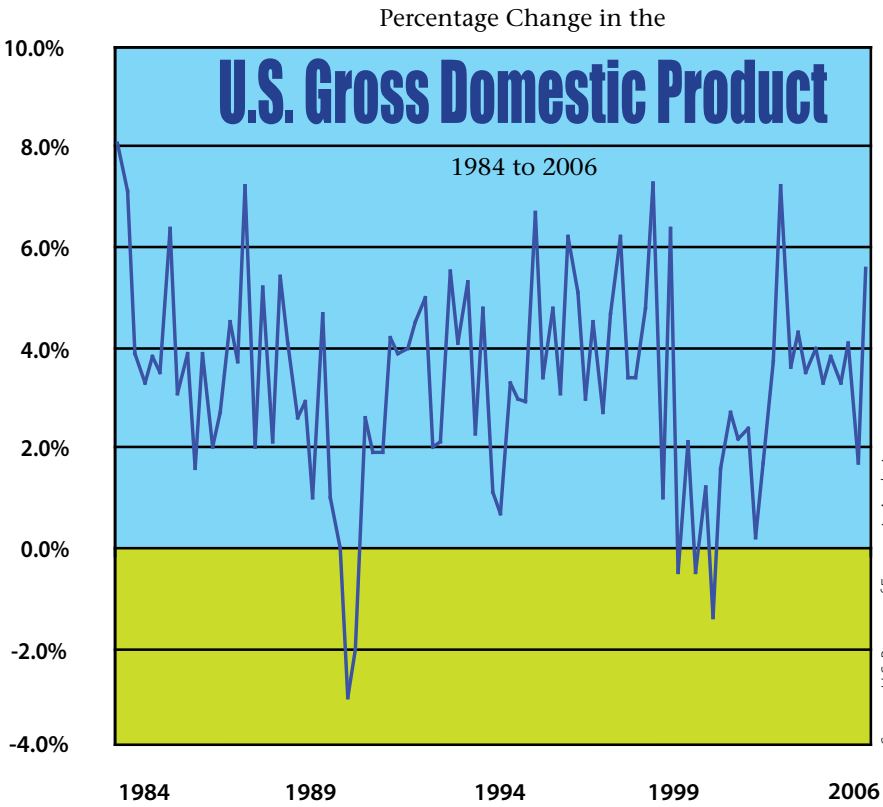
Oil prices remain high and have the potential to go higher. This keeps import values high and the nation’s trade imbalance growing, even with the falling dollar making U.S.-made goods more attractive to overseas consumers.

Inflation concerns are mounting, as evidenced by rising bond yields. The factors that supported low inflation for years are fading. Energy prices are up and looking like they will stay that way. Commodity prices have been consistently high also, although so far, businesses seem to have absorbed that cost themselves. How long will they continue to do so? With the dollar falling, cheap imports are not as cheap as they were. The dollar is expected to stay down and possibly fall more. This makes the cheap imports that we have built our materialism around more expensive.


Rising inflation reduces consumer purchases and enhances the possibility of the Federal Reserve raising interest rates further, which, in turn, raises the price that businesses pay to borrow money. However, the business community is flush with cash from persistent high profit margins. Therefore, it is yet to be seen if the rising interest rates producing higher borrowing costs will slow business investments as they historically have—or will businesses circumvent this hurdle by drawing down their wealth of in-house cash to finance their investments and expansions?



Labor costs are accelerating in this low unemployment environment. Over the past ten years, much of the nation’s increased labor costs have been offset by productivity gains, thus not forcing businesses to pass on the costs to consumers. Productivity growth remains high but is probably peaking and moving forward. If productivity gains don’t offset increasing labor costs, businesses will pass this cost on to the consumer. ⓘ




# *Career Spotlight:* Automotive Service Technicians *and* Mechanics



If your car has ever broken down, you know the value of a good automotive service technician. Today's sophisticated cars require high-tech skills and equipment to diagnose, repair, and maintain our vehicles. Those with good problem-solving skills and formal technical training will be highly sought after for these challenging, well-paying jobs. According to the U.S. Bureau of Labor Statistics, these jobs pay an average of \$16.70 an hour in Utah and are expected to have over 400 job openings per year.

There is an exciting variety of opportunities in the automotive repair industry along with room for advancement. Applied technology programs allow students to earn their Automotive Service Excellence (ASE) certification, the standard credential for auto repair professionals that employers require. A student can begin as an apprentice and rise to the level of master technician gaining more training and experience. Master technicians are proficient in eight recognized areas of automobile service, and can earn upwards of \$25 an hour. Pay rates are expected to climb even more as there are not enough qualified master technicians to meet demand. Technicians with leadership ability and good customer service skills can further advance to service manager or cost estimator. Some even become entrepreneurs and open up their own shops.

Is a career in automotive technology the right fit for you? Recognizing your strengths, interests, and abilities will help you chart a course for success. Those employed in the industry say that mechanical ability, problem-solving skills, patience, and good hand-eye coordination are important. Technicians also need good reading abilities and basic mathematic and computer skills to follow instructions in technical manuals. Employers value customer service and communication skills, since customers are more likely to return when they receive courteous and reliable service.

Check out the Utah College of Applied Technology web site at <http://www.ucats.org> or Utah System of Higher Education at <http://www.utahmajors.org/majors/x.pub?page=100&referrer=9&code=493023> to learn more! 

*Did you know...*

*New cars today have more computers onboard than the first spacecraft?*

Any way you

# slice it

system used in the projections has a training code assigned to it by the U.S. Bureau of Labor Statistics. These 11 training codes range from occupations that require virtually no training other than observing another worker in an on-the-job setting, to significant formal training where a professional degree is required (i.e. attorney). For the purposes of clarity, the top 5 of the 11 training level codes were combined into a group of bachelor's degree or higher, leaving only 6 groups to discuss a more workable number. Refer to the two graphs for jobs by training level and wages in 2014 and jobs by training level and wages for the new jobs created between 2004 and 2014. The average hourly wages in both these graphs reflect 2005 values.

## *The new 2004-2014 Utah job outlook from a training level and wage perspective*

The other training levels include associate degrees, applied technology programs, work experience, the school of hard knocks, long-term on-the-job training (a year or more of on-the-job training which may include formal classroom or skill training), moderate-term on-the-job training (one month to one year), and short-term on-the-job training (less than one month).

Clearly most of the jobs in Utah fall in the short-term on-the-job training category where 35.2 percent of jobs in 2004 were, and where 34.2 percent of jobs in 2014 will be. Moderate-term on-the-job training is required of about 20 percent of jobs in the state, both in 2004 and 2014. Long-term on-the-

job occupations, which are more skilled because of training and work experience, account for an 8-percent slice of Utah jobs in 2004 and 2014. Occupations that require work experience add just under 8 percent of the total.

Jobs in occupations calling for post-secondary training (beyond high school) include those in the applied technology occupations (about 5 percent of the total) and in jobs requiring an associate's degree. Associate degree occupations accounted for 3.5 percent in 2004 and 3.8 percent in 2014.

The major thrust of this training level analysis, comparing 2004 and 2014 is simple. The trend is for more training. That means the economy, at least for the better jobs, is going to look toward more post-secondary training—training beyond high school. To make the point even clearer, let's look at the training requirements of new jobs between 2004 and 2014. Of the anticipated

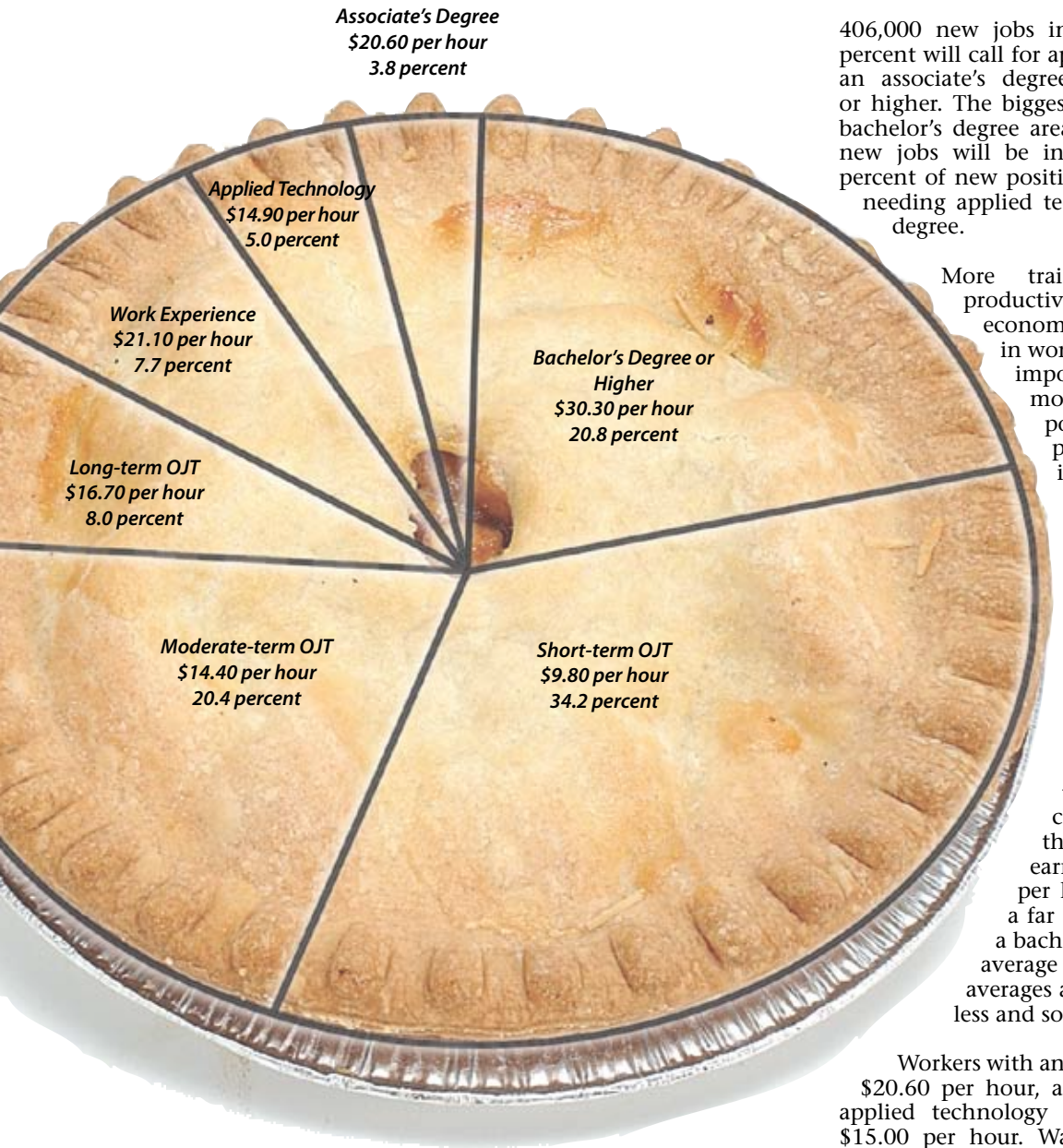
*Continued*

Not all jobs in Utah require a bachelor's degree, but those that do pay much better. An analysis of the training level and wages of Utah's jobs now and in 2014 corroborates this statement. This is not radical news. In this analysis the training levels/requirements of Utah jobs and their current pay reflect the continuing trends in the labor market. First let's look at the training and job picture, followed by meshing in the average pay associated with the different training levels.

The percent of total jobs in Utah requiring a bachelor's degree or more is about 20 percent, or one in five jobs. In 2004, the base year of the projections, about 19.9 percent of the total 1.3 million jobs in Utah called for a bachelor's degree or higher. In 2014 the bachelor's percentage increases to 20.8 percent (see the first graph). Total jobs in 2014 are projected to reach the 1.7-million mark.

In the analysis, each of the approximately 750 occupations in the occupational classification

Percent of  
**Utah Jobs in 2014**  
by Training Level and 2005 Average Wage



406,000 new jobs in Utah through 2014, 34 percent will call for applied technology training, an associate's degree, or a bachelor's degree or higher. The biggest difference will be in the bachelor's degree area where 24 percent of the new jobs will be in that category. About 10 percent of new positions will be in occupations needing applied technology or an associate's degree.

More training enhances worker productivity, which enables our economy to be more competitive in world markets. And even more important to the individual, more training yields the potential for a bigger paycheck, which leads us into the next topic of the analysis, the relationship between training and higher wages.

**More Training = More Money**

The old adage of the more you learn, the more you earn, is true. Workers qualifying for occupations that call for virtually no training, those that are classified as short-term on-the-job training, can expect to earn an average of about \$9.80 per hour (2005 wages). This is a far cry from those that obtain a bachelor's degree or higher who average \$30.30 per hour. These are averages and some workers will earn less and some a great deal more.

Workers with an associate's degree averaged \$20.60 per hour, and those with training in applied technology programs averaged about \$15.00 per hour. Wages for those workers in occupations requiring work experience registered a wage of just over \$21.00 per hour. This wage is higher because many of these workers have been in their jobs for many years and have worked their way up the pay structure. Long-term on-

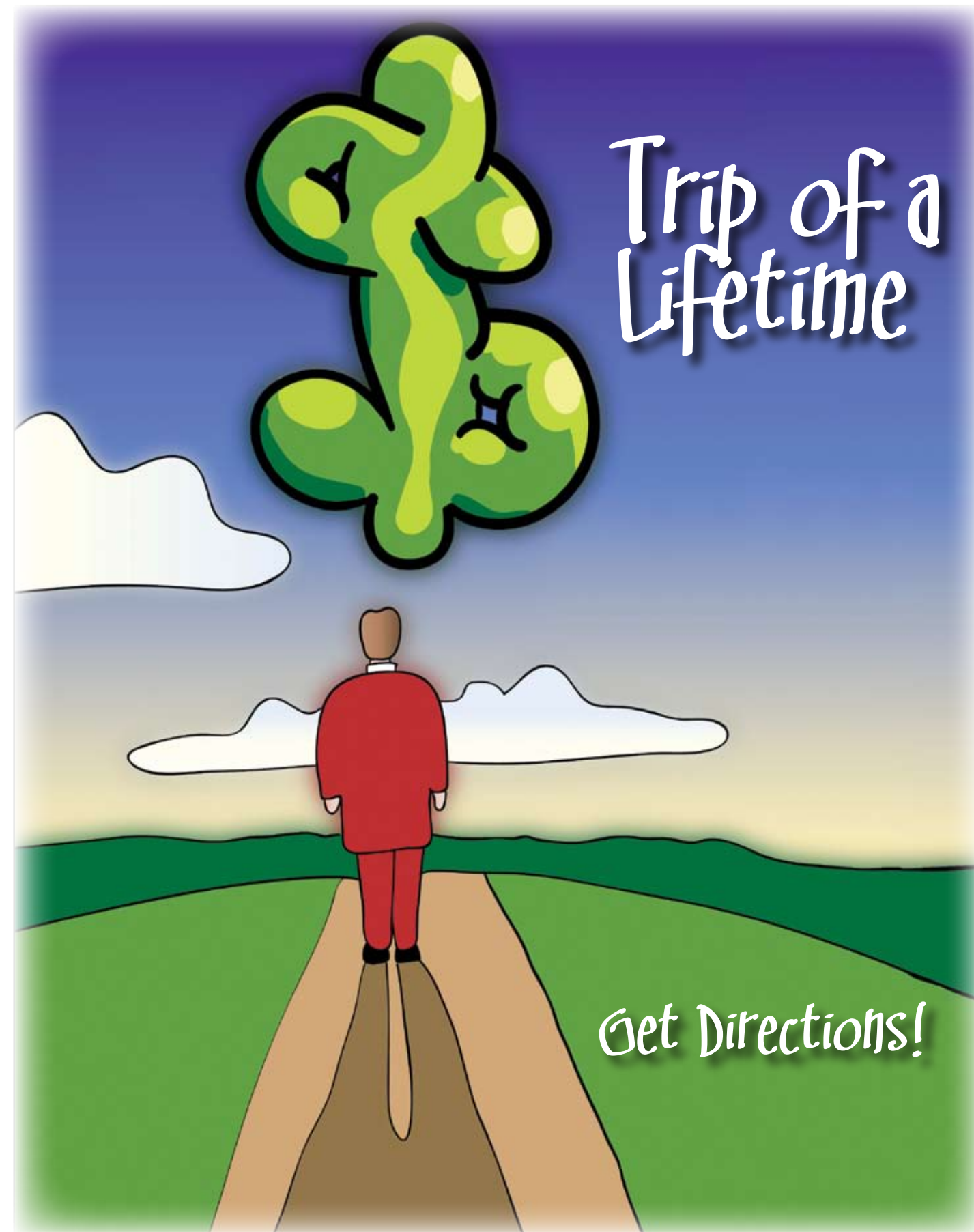
*For more information on Utah's and the nation's job outlook, go to:*

<http://jobs.utah.gov/opencms/wi/occi.html>  
<http://jobs.utah.gov/opencms/wi/pubs/outlooks/state/>  
<http://www.bls.gov/oco/>  
<http://www.bls.gov/opub/ooq/2006/spring/contents.htm>

the-job occupations averaged \$16.70 per hour and moderate-term occupations a little less at \$14.40 per hour.

The point is clear: get more education to make more money. Another very important point needs to be made. It is obvious from the data there is a relationship between training and wage. What is very important, but less apparent, is that earning power is limited if you lack post-secondary training. The potential for higher pay is limited by the lack of training or education. Earning potential is not limited if you get more training. Remember, work is a lifelong experience, and if you limit yourself to just graduating from high school and do not pursue further training, your lifetime earnings will be significantly restricted (see the section in this issue on economic insights for more in-depth information).





When was the last time you took a vacation? Did you head out of town? Did you have a destination in mind? Did you make some preparations, like gassing up the car or making flight reservations? Maybe you even went so far as to plan where you would be staying each night along the way.

This kind of planning is fairly typical of people hoping to make the most of their time away from work. Going online to check out all the travel options, discussing potential destinations with friends and co-workers, consulting a travel agent; it's all part of the fun! This kind of research and planning allows us to spend some time enjoying the trip before we ever leave home.

We're more likely to have a journey that isn't interrupted by such events as road closures, weather delays, or cancelled flights if we simply take some time to get directions from informed sources. This isn't to say that we can't alter our plan along the way. Maybe avoiding that road closure takes us somewhere that we decide we'd like to stop and explore, or perhaps the travel agent suggests a destination that we might never have considered on our own.

What does any of this have to do with career planning? Consider this: people spend way more time at work than they do on vacation, but questions like, "Did you have a destination in mind?" "Did you make some preparations?" when applied to careers are often met with a blank stare. The sad fact is that many people put more thinking into choosing a vacation destination than they do their vocation destination!

School counselors and others are working to remedy this situation by helping today's students get directions for the trip of a lifetime—their careers. One important strategy in this effort\* is the implementation of Utah's Career and Technical Education (CTE) Career Pathways.

The goal of Career Pathways is to establish a seamless education system that provides a one-system approach for student success, whether they're heading to formal education programs beyond high school, going directly to work, or—as is common—doing both.

The Utah CTE Career Pathways are the maps that can help guide students to the high school courses

and postsecondary options most relevant to their chosen career destinations. Career Pathways facilitate the same kind of planning for careers that is applied to vacations. The strategy helps students know just where to go on-line to check out all the career options, have opportunities to discuss potential career destinations with friends, and regularly consult counselors, teachers and their parents as they plan their career journey. This kind of research and planning in school allows students to spend some time enjoying the trip before they ever leave home. It should also result in a more pleasant journey, unencumbered by unnecessary delays, while allowing for periodic evaluation of both the course and destination. And, who knows? Getting directions from informed sources along the way may lead students to a destination that they might never have considered on their own.

For more detail visit [www.utahcte.org](http://www.utahcte.org). For more information on the role that teachers and families play, visit [www.acrna.net/publications.htm](http://www.acrna.net/publications.htm).

*\*For more information on the critical role that teachers, counselors and families play in assisting young people to make informed career and academic choices, visit America's Career Resource Network Association: [www.acrna.net/publications.htm](http://www.acrna.net/publications.htm)*

To Get Directions For  
Your Career Visit  
[www.careers.utah.gov](http://www.careers.utah.gov)

# U.S. Occupational Outlook to 2014

Career decisions made when first entering the labor market, or at any point over a potential 30-to 50-year working life, are made in as many different ways as there are different people. One important piece of information labor economists try to provide to assist job seekers—in choosing an occupation, pursuing training and developing skills—is the demand outlook for different occupations in the near future.

Every two years the Bureau of Labor Statistics (BLS) updates the projected openings for occupations. The latest outlook was released at the end of 2005, covering the decade 2004 through 2014. This is an attempt by national labor force economists to provide their best estimate of the demand for about 750 occupations in the coming decade.

The projected demand for occupational job opportunities is composed of the number of replacement job openings plus the new jobs created by the expanding economy. From 2004 to

2014 the BLS economists expect the economy to generate 18.9 million new jobs and an additional 35.8 million replacement job openings, bringing total job openings to 54.7 million.

For every new job opening due to economic growth there are almost two replacement jobs available. Replacement jobs are those that open up due to retirement or any other reason people leave employment.

The near-future prospect for job opportunities is estimated by projecting ongoing economic trends.



These trends can, and do, change unexpectedly because of shifts in technology, consumer preferences, trade patterns, or other unpredictable events. Therefore, projected job demand, while very useful in determining future job prospects, is uncertain as actual economic events unfold.

The demand estimates show expected job growth or decline by occupation. The best opportunities for job seekers are found in expanding industries where new and replacement job openings are relatively plentiful. Of course job-hunting success is heavily influenced by competition—how many people desire to do a particular type of work.

The best jobs not only have many openings, they also provide the income necessary to meet personal and family financial goals. The following list shows 20 occupations with the most projected openings that also have median annual earnings higher than at least half of all workers. There are different training, educational and experience requirements for the various jobs listed.

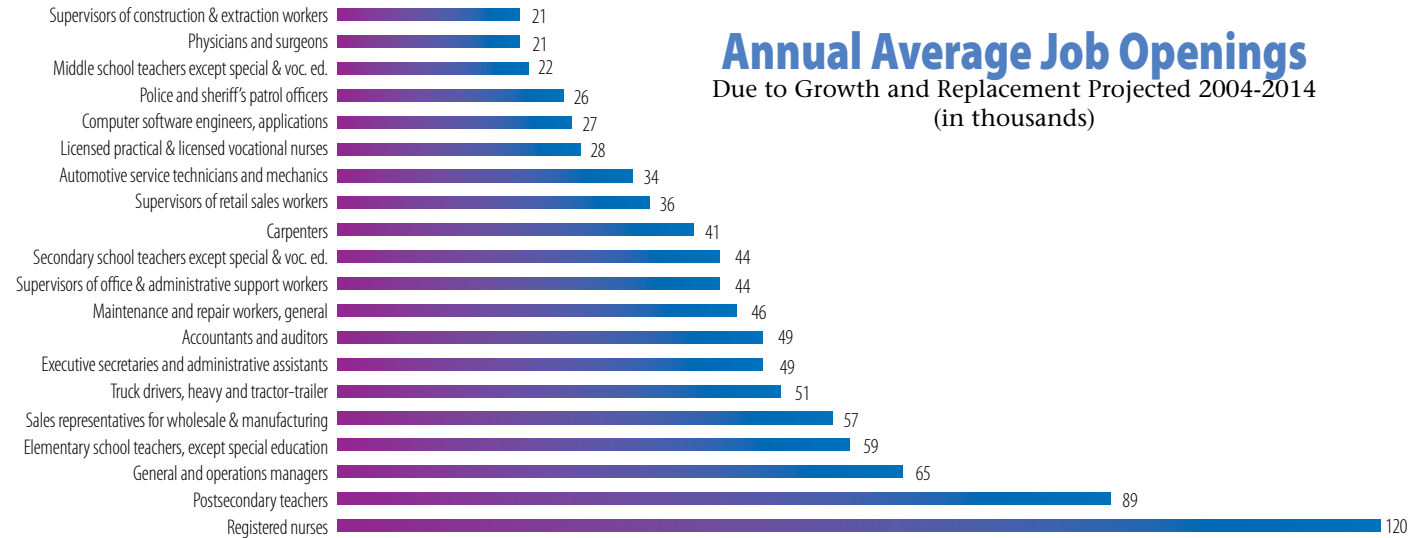
The next list shows the usual source of education and training needed to acquire entry-level skills for each of these occupations.

A detailed article and outlook for all 750 occupations is available at the following link: <http://www.bls.gov/opub/mlr/2005/11/art5abs.htm>

Other articles concerning BLS 2004 to 2014 economic projections are found at this link: [www.bls.gov/opub/mlr/2005/11/contents.htm](http://www.bls.gov/opub/mlr/2005/11/contents.htm)

Occupation	Usual Source of Education or Training
Registered nurses	Associate Degree
Postsecondary teachers	Doctoral Degree
General and operations managers	Experience plus Degree
Elementary school teachers, except special education	Bachelor's degree
Sales representatives for wholesale & manufacturing	Moderate-term on-the-job training
Truck drivers, heavy and tractor-trailer	Moderate-term on-the-job training
Executive secretaries and administrative assistants	Moderate-term on-the-job training
Accountants and auditors	Bachelor's degree
Maintenance and repair workers, general	Moderate-term on-the-job training
Supervisors of office & administrative support workers	Related work experience
Secondary school teachers except special & voc.ed.	Bachelor's degree
Carpenters	Long-term on-the-job training
Supervisors of retail sales workers	Related work experience
Automotive service technicians and mechanics	Postsecondary vocational training
Licensed practical & licensed vocational nurses	Postsecondary vocational training
Computer software engineers, applications	Bachelor's degree
Police and sheriff's patrol officers	Long-term on-the-job training
Middle school teachers except special & voc. ed.	Bachelor's degree
Physicians and surgeons	First professional degree
Supervisors of construction & extraction workers	Related work experience

Source: U.S. Bureau of Labor Statistics



Source: Utah Department of Workforce Services

# Utah Job Trends



Wondering what to be when you (or your children) grow up? Well, you just might want to take a look at the 2004-to-2014 occupational projections recently released by the Utah Department of Workforce Services.

### Demand Side Economics

First, a word of caution: These projections only provide information on the “demand” side of the labor market equation. In other words, the openings that employers are expected to “demand” by occupation. However, some occupations may have a large number of openings, but an even larger number of willing workers. Unfortunately, labor supply information is notoriously difficult to obtain.

Also, remember that openings are created in two ways. Replacement job openings are created when people leave an occupation for retirement, for a new occupation, to sail around the world, or whatever reason. New openings are also generated when companies expand or move to the area. Because employers need to replace workers leaving an occupation, even declining occupations will have some openings available.

### On to the Data. . .

Since we make projections for roughly 700 occupations, but have limited space, let’s focus on major groups of occupations. We expect office and administrative support (clerical) occupations to have the largest number of total annual openings between 2004 and 2014 in Utah. Although computers have eliminated the need for many clerical workers and this group shows one of the lowest job growth rates, this occupational group is currently largest in the state. Its large initial size places administrative support occupations on top.

Other groups with large number of annual openings include sales occupations, food

preparation/serving occupations, construction/extraction occupations, and production positions.

### Growing Right Along

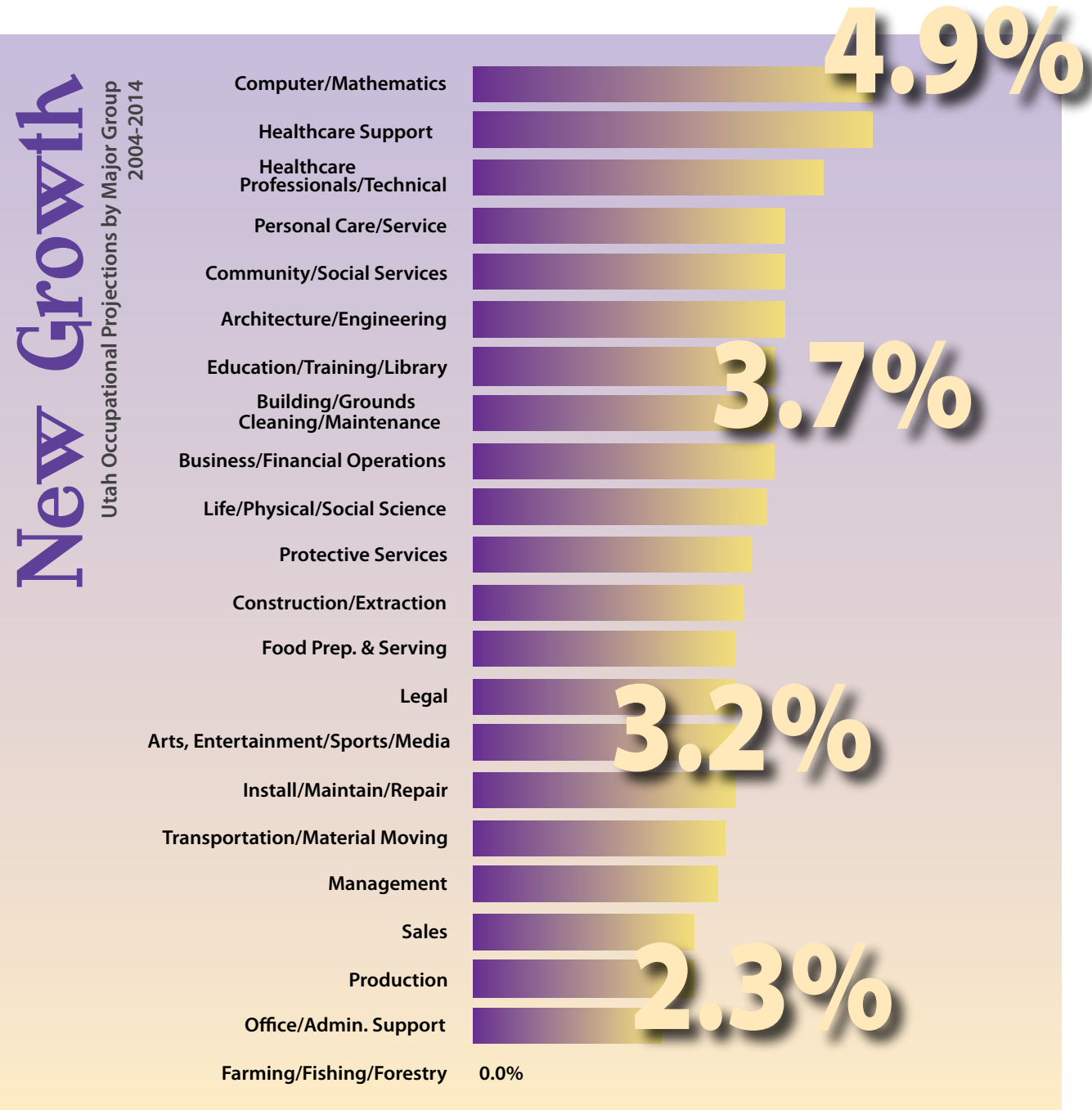
Ranking these major occupational groups by the growth rate of new positions paints a different picture. Computer/mathematics and healthcare support occupations show the highest projected annual rates of expansion—almost 5 percent compared with the average for all occupations of 3 percent. The higher-skilled healthcare professional

and technical occupations fall in close behind with a 4-percent growth rate. Obviously, filling healthcare positions will continue as a labor market priority in the years ahead.

### Your Future is in the Stars

To help our users navigate what the projections mean we currently apply star ratings to occupations with at least 100 workers. The occupations with the best employment demand outlook and high wages are given a five-star rating. Occupations

*Continued*



with poor employment outlook and low wages are given the lowest rating. The following lists show the best of the best occupations for 2004-2014 by training category.

**Bachelor's Degree or Higher:** Chief executives, computer/information systems managers, computer software engineers, construction managers, financial managers, general/operations managers, lawyers, marketing managers, mechanical engineers, pharmacists, and sales managers.

**More than High School, Less than Bachelor's Degree:** Real estate appraisers/assessors, bus/truck/diesel mechanics, civil engineering technicians, dental hygienists, electrical/electron-

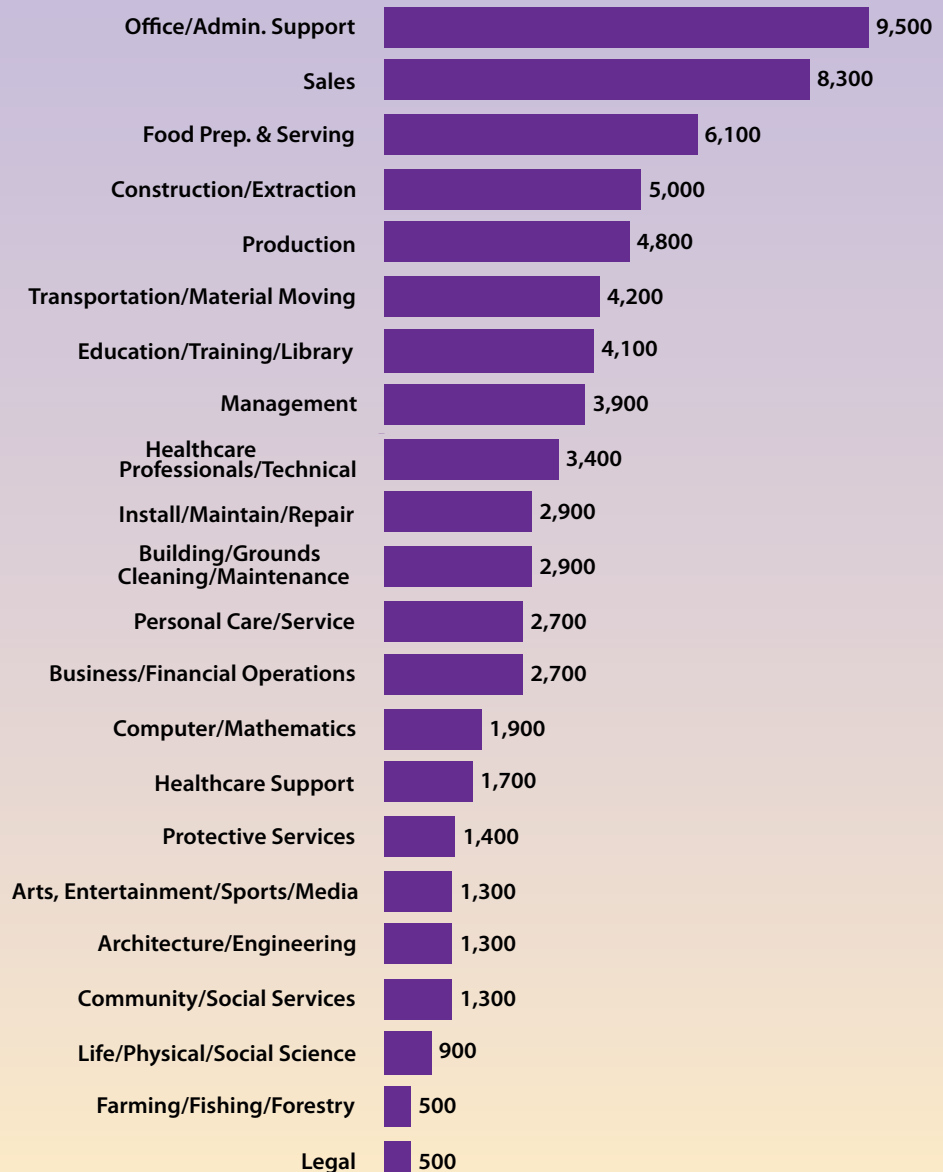
ic engineering specialists, paralegals, radiologic technologists/technicians, real estate sales agents, registered nurses, respiratory therapists.

**On-the-Job Training:** Food service managers, plumbers, police/sheriff's patrol officers, sales representatives, and first-line supervisors/managers of the following occupational groups: construction/extraction trades, mechanics/installers/repairers, non-retail sales workers, office/administrative support workers, and production/operating workers.

For more information on Utah's occupational projections, see [/jobs.utah.gov/wi/occi.asp](http://jobs.utah.gov/wi/occi.asp)

# Annual Openings

Utah Occupational Projections by Major Group  
2004-2014



# MotorFest

## A Great Opportunity for Utah Youth

### MotorFest Event Schedule:

September 27<sup>th</sup> & 28<sup>th</sup>, 2006  
Salt Lake Community College  
Larry H. Miller Campus • 9750 S. 300 W. • Sandy  
8:00 am – 2:30 pm

### Career Fair:

September 28, 2006  
3:00 pm – 6:00 pm

### Family Night Event:

September 28, 2006  
6:30 pm – 8:30 pm


For more information contact:

**Melisa Stark**

mstark@utah.gov • 801-776-7240

Careers in automotive and diesel occupations can offer competitive salaries, benefits and opportunities for advancement. The MotorFest event was created to assist in educating youth about the exciting and diverse career field of automotive and diesel repair while dispelling negative notions about it. This event will feature professional demonstrations, interactive exhibits and hands-on activities in the most in-demand occupations in the field.

Over 2,000 junior high and high school students have been invited to participate in this event and will rotate through three different activity areas: automotive, diesel and related occupations, and training. Each station will focus on National Automotive Technicians Education Foundation (NATEF) certification areas including engine performance, brakes, transmissions, electrical, and steering and suspension. Automotive and diesel occupation employers will have the opportunity to show students why computer, math and science skills are an important factor in these careers. Students will also have the opportunity to learn about training opportunities, such as apprenticeships, along the Wasatch Front.

Don't miss this opportunity to learn about automotive and diesel occupations! 



# FROM SPORTS TO SPACE

Towering mountains covered in snow. A seemingly endless wilderness made of red rock. Utah is renowned for both the world over. Now it is time to add another landmark to that list — Utah's advanced composites manufacturing industry. Like our mountains and red-rock country, our advanced composites industry is poised to put Utah in the global limelight.

Just as the mountains spawned the ski industry and red rock gave rise to Moab, the "space race" and "weapons race" gave Utah its advanced composites industry. In the 1950s, Hercules Inc. began manufacturing rocket motors used by the United States for missiles and the space program. Since weight was of vital importance in those motors and their casings, advanced composite materials became an improved alternative to metal.

Advanced composite materials result when a fiber is combined with a resin – in other words when string and glue are combined and allowed to dry and harden. In the case of advanced composites the string is often a carbon or kevlar fiber and the resins are high-tech glues with very specific material properties. When dried or "cured," composite structures are stronger than steel and lighter than aluminum. A basic example of a composite application is a fiberglass hull for a boat. The combination of the fiberglass and resin is essentially laid into a mold and allowed to harden. That same basic process is applied in advanced composite manufacturing businesses in Utah and used to build an immense range of products — from arrow shafts to rocket boosters.

Somewhere in the middle of that sizable range of composite products lie skis and jets. And while there is no doubt the two are very different in countless ways, both are similar in that they are manufactured here in Utah with advanced composite materials. Goode Ski Technologies, the worldwide leader in composite water skis and snow ski poles, relocated to Utah in 2004 from Michigan. Goode has made a significant impact on its markets, in fact, several World Championships have been won on a Goode water ski. The decision to begin building snow skis prompted Goode's move to Utah. Certainly, Utah offers the unique combination of an advanced composites presence and proximity to world-class ski resorts.

**Conservative estimates target a need for several hundred more employees within the next two years with aggressive estimates nearing 1,000 new employees over the next three years.**

Spectrum, an aircraft design company, partnered with Rocky Mountain Composites in Spanish Fork to develop a lightweight jet — the Spectrum 33—fabricated almost exclusively with advanced composites. Several Utah companies have supplied components for the Spectrum jet, including Advanced Composite Technologies, TCR and Williams International. The advantages of using advanced composites include lower maintenance costs and increased performance and fuel efficiency. Those are key performance areas in the world of aviation, which will certainly boost sales once the FAA approves the jet.

With the approval of the Spectrum jet, Utah's advanced composites industry will have yet another successful manufacturing company providing gainful employment to residents. The Utah companies in this industry represent the entire supply chain for the advanced composites market, from raw materials to finished product. Examples of Utah's depth are Hexcel and TCR Composites, both of which produce raw materials; HyPerComp, Lotus Designs, and SES Engineering which provide research, development, and

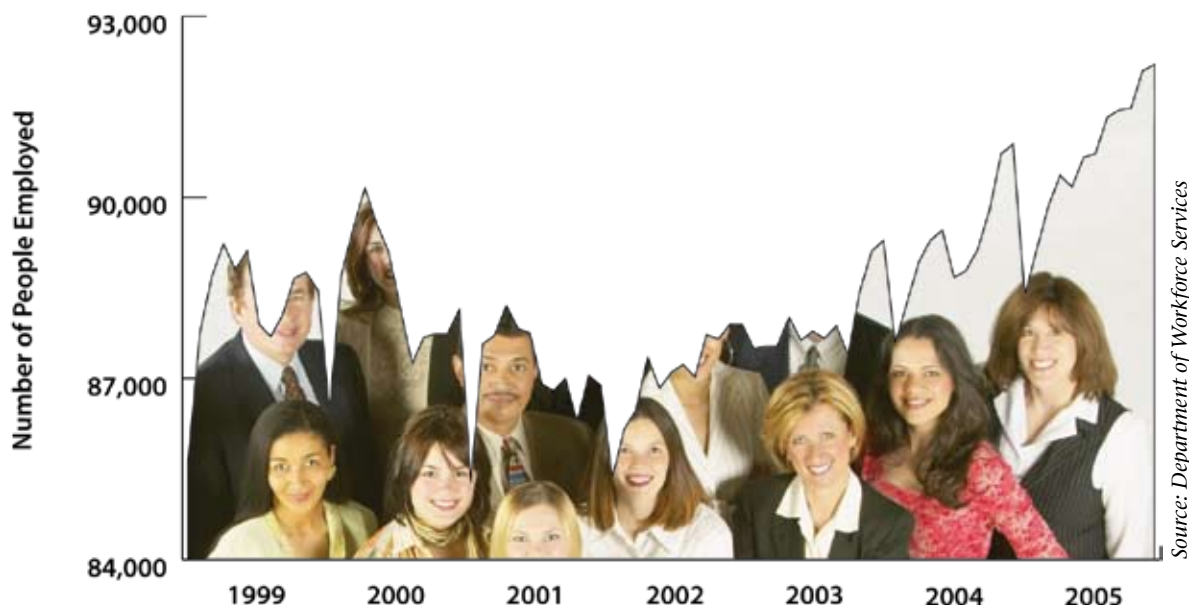
engineering; EDO, ATK and Contour Composites which provide composite parts that are integrated into Boeing, Airbus, Lockheed, and various other aircraft; and finally Spectrum, Goode Ski Technologies, and Adam Aircraft, all of which sell products directly to consumers.

A review of Utah composite manufacturers indicates that the industry pays between \$25,000 for entry-level wages to \$57,000 for more experienced staff. Engineers and advanced science positions pay even more and employment is expected to grow faster than the national average over the next few years. Conservative estimates target a need for several hundred more employees within the next two years with aggressive estimates nearing one thousand new employees over the next three years. The depth of this industry with its projected growth will undoubtedly benefit the state and give Utah another well-earned spot in the limelight.

*For more information, please contact Michael Driscoll, GOED Talent Access Program, 538-8622.*



# Weber County



Weber County is located on the north end of Utah's urban corridor. Ogden, the county's largest city, has been historically known as "Hub City," a moniker derived from the importance of the railroad in earlier days. A newer nickname, at least of the Ogden area, is "Junction City," which is part of a burgeoning economic development project to add new life to downtown Ogden.

Weber County's population is growing. Since 1990 some 55,000 persons, originating both from immigration and from natural increase, have been added to the count, lifting the total from about 159,000 to 214,000. Jobs are a big player in why population has grown. Even with the recession that struck hard, resulting in Weber County actually losing jobs, the county is coming out of these doldrums with more jobs now than in 2000. In terms of numbers, this equates to jobs increasing from 88,300 in 2000 to 90,460 in 2005.

Weber County has always been known for manufacturing activity, and it still is. The area has suffered the ill effects of the national and state economic downturn that hit manufacturing hard. Between 2001 and 2005 in Weber County this industry has shed 2,160 jobs. The economic recovery is well underway and Weber's manufacturing industry's downward trend is turning around with new additions in the

aerospace and ski industries. Although not out of the woods yet, Weber's economy is holding its own and all indicators point toward steady growth in population and employment.

- Ogden is continuing to revitalize its downtown with the development of the old mall site with a new recreation center, theatres, children's museum, and other commercial and residential building.
- Weber County is on its way to becoming an aerospace center with the addition of the Adam's Aircraft plant and other aerospace-related businesses.
- Commuting...Of the 90,600 workers who resided in Weber County (in 2000), 29 percent did not work in Weber County. Most of the commuters worked in Davis County (18 percent of total Weber workers, or 16,700) or Salt Lake County, which attracted 6,400, or 7 percent, of all Weber employees.
- Along with manufacturing, government is an important employer in Weber County. In fact, four of the five largest employers are in either federal, state, or local government.

*just  
the  
facts...*

### June 2006 Unemployment Rates

### Changes From Last Year

Utah Unemployment Rate	3.1 %	↗	0.9 points
U.S. Unemployment Rate	4.6 %	↗	0.4 points
Utah Nonfarm Jobs (000s)	1,204.5	↘	4.8 %
U.S. Nonfarm Jobs (000s)	136,380.0	↘	1.4 %

### June 2006 Consumer Price Index Rates

U.S. Consumer Price Index	202.9	↘	4.3 %
U.S. Producer Price Index	165.9	↘	7.5 %

*Source: Utah Department of Workforce Services*

### June 2006 Seasonally Adjusted Unemployment Rates

Beaver	2.6 %
Box Elder	2.9 %
Cache	2.4 %
Carbon	3.3 %
Daggett	4.1 %
Davis	2.9 %
Duchesne	2.9 %
Emery	3.3 %
Garfield	4.8 %
Grand	4.3 %
Iron	2.5 %
Juab	3.9 %
Kane	3.1 %
Millard	2.5 %
Morgan	3.1 %
Piute	3.3 %
Rich	2.1 %
Salt Lake	3.1 %
San Juan	5.8 %
Sanpete	3.3 %
Sevier	2.9 %
Summit	2.8 %
Tooele	3.2 %
Uintah	2.5 %
Utah	2.8 %
Wasatch	2.9 %
Washington	2.4 %
Wayne	4.0 %
Weber	3.6 %

*Watch for these features in our  
Next Issue:*

### Theme:

*American Community Survey*

### County Highlight:

*Wayne*

### Occupation:

*Health Occupations*

# Looking

for something new?



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[jobs.utah.gov/wi](http://jobs.utah.gov/wi)